CLAIM AMENDMENTS:

1. (currently amended) Decalcification method of an aqueous solution of whey or whey permeate comprising multivalent cations Ca^{2+} and Mg^{2+} and anions able to form complexes with at least a part of said multivalent cations, characterised in that it comprises the operations:

(a) of replacement of at least a part of said anions able to form complexes of the aqueous solution by monovalent anions such as Cl^-, non-able to form such complexes, and

(b) of replacement of at least a part of said multivalent cations of the aqueous solution by monovalent metal cations, such as Na^+ and/or K^+, operation (b) being performed simultaneously to operation (a) or performed on the aqueous solution having undergone operation (a), wherein operation (a) comprises the processing of said aqueous solution by an anionic resin of which the counter-ion is a monovalent anion non-able to form complexes with said multivalent cations, and operation (b) comprises the treatment of said aqueous solution by a cationic resin of which the counter-ion is a monovalent metal cation.

Claim 2 (cancelled).

3. (currently amended) Method according to claim ~~2~~ 1, in which said aqueous solution further comprises monovalent anions non-able to form complexes with said multivalent cations, characterised in that said monovalent anion forming the counter-ion of the anionic resin is of the same type as the monovalent anions contained in the aqueous solution.

4. (previously presented) Method according to claim 3, in which the aqueous solution further comprises monovalent metal cations, characterised in that the monovalent metal cation consisting the counter-ion of the cationic resin is of the same type as the monovalent metal cations contained in the aqueous solution.

5. (previously presented) Method according to claim 4, characterised in that it further comprises an operation (c) of regeneration of the anionic resin and/or the cationic resin by means of a regeneration agent.

6. (original) Method according to claim 5, characterised in that the regeneration agent is an aqueous solution comprising a dissolved salt of which the cation is of the same type as the monovalent metal cation forming the counter-ion of the cationic resin.

7. (original) Method according to claim 6, characterised in that the anion of the dissolved salt is of the same type as the monovalent anion forming the counter-ion of the anionic resin.

8. (previously presented) Method according to claim 7, characterised in that regeneration operation (c) comprises treatment in series of the anionic resin then of the cationic resin.

9. (previously presented) Method according to claim 7, characterised in that regeneration operation (c) comprises the treatment in parallel of the anionic resin and of the cationic resin.

10. (previously presented) Method according to claim 1 wherein the aqueous solution comprising multivalent cations Ca^{2+} and Mg^{2+} and anions able to form complexes with at least a part of said multivalent cations is whey or a permeate from the

ultrafiltration of a whey, this whey and this permeate comprising Ca^{2+} and Mg^{2+} ions, Cl^- anions, Na^+ and K^+ cations and anions selected from the group consisting of phosphate anions, anions from organic acids able to form complexes with the Ca^{2+} and Mg^{2+} ions and their mixtures.

11. (currently amended) Method according to claim ~~2~~ 1, in which the aqueous solution further comprises monovalent metal cations, characterised in that the monovalent metal cation consisting the counter-ion of the cationic resin is of the same type as the monovalent metal cations contained in the aqueous solution.

12. (previously presented) Method according to claim 11, characterised in that it further comprises an operation (c) of regeneration of the anionic resin and/or the cationic resin by means of a regeneration agent.

13. (previously presented) Method according to claim 12, characterised in that the regeneration agent is an aqueous solution comprising a dissolved salt of which the cation is of the same type as the monovalent metal cation forming the counter-ion of the cationic resin.

14. (previously presented) Method according to claim 13, characterised in that the anion of the dissolved salt is of the same type as the monovalent anion forming the counter-ion of the anionic resin.